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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/555,044	10/28/2005	Thanh Van Do	OSL-028	2304
7590 Thomas Schneck Schneck & Schneck P O Box 2-E San Jose, CA 95109-0005			EXAMINER AJIBADE AKONAI OLUMIDE	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 09/26/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/555,044

**Applicant(s)**

DO ET AL.

**Examiner**

OLUMIDE T. AJIBADE AKONAI

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 October 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-16 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 28 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date 10/24/2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 3 recites the limitation "said open devices" in line 15. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Haller et al 7,039,033 (Hereinafter Haller)** in view of **Elkberg et al 6,909,721 (hereinafter Elkberg)**.

Regarding **Claim 1**, Haller discloses a Virtual Device composed of a multitude of stationary and/or portable electronic devices (see fig. 1, col. 4, lines 14-16) comprising: a first Open Device with an available inner structure and a network interface (gateway device 106, see fig. 1, col. 4, lines 16-19); at least one Primitive Device (terminal 107 being a headset, pager, or watch, see fig. 1, col. 4, lines 16-31) arranged to communicate with other devices and act as a pure slave to said devices (see fig. 1, col. 4, lines 16-31), at least one Closed Device with a closed inner structure and a network interface (terminal 107 being a smart terminal, see figs. 1 and 2, col. 4, lines 16-31, and 61-67, col. 5, lines 1-8); said Open and Closed devices being connected in a Personal Area Network (gateway device 106 and terminals 107 communicate to form a personal area

network, see fig. 1, col. 4, lines 15-19), a Personal Area Network middleware being installed in said first Open Device (gateway device 106 with PAN server that comprises a middleware, see col. 5, lines 61-63, col. 6, lines 36-42, and lines 58-62, col. 7, lines 13-20, and col. 9, lines 35-38 and 61-67) said first Open Device being arranged to act as a personal Area Network controller (terminals 107 communicate by way of gateway device 106, see fig. 1, col. 4, lines 16-31 and lines 58-60), said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device (terminals 107 communicate by way of gateway device 106, and the gateway device having a PAN router for routing packets to other terminals see fig. 1, col. 4, lines 16-31 and lines 58-60), said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network (terminals 107 communicate by way of gateway device 106, and the gateway device having a PAN router for routing packets to other terminals see fig. 1, col. 4, lines 16-31 and lines 58-60).

Haller does not explicitly disclose wherein said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network, said Open Device being arranged to discover and register any devices present in said Personal Area Network, said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices are

members of said Private Area Network, which Open, Closed or Primitive Devices that are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices should be visible on an external network, the distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present, said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware.

In the same field of endeavor, Elkberg discloses an open device (server 110, see figs. 1 and 2A, see, col. 3, lines 46-48) comprising a Personal Area Network middleware (middleware 220, see fig. 2A, col. 5, lines 13-15) that is arranged to store and maintain a device profile (middleware 220 comprising application directory 230 to store device role and application in the network 100, see figs. 1 and 2A, col. 5, lines 22-25), said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network (application directory storing device type, application, and role, see fig. 2A, col. 5, lines 22-25), said Open Device being arranged to discover and register any devices present in said Personal Area Network (server 110 or server S detecting other terminal devices in the piconet 100, and registering the devices in its middleware, see figs. 1 and 4B, col. 6, lines 34-42, col. 7, lines 62-67, and col. 8, lines 1-32), said Personal Area Network middleware being arranged to store and maintain a user profile,

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said user profile including information on at least which Open, Closed or Primitive Devices are members of said Private Area Network (see fig. 2A-2B, 4A-B, col. 8, lines 23-32), which Open, Closed or Primitive Devices that are available for said Private Area Network (adding terminals from the piconet 100 that the server is likely to communicate with into the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), redirection information (device identifier, see figs. 2A-2B, 4A-4B, col. 8, lines 23-25), which Open, Closed or Primitive Devices should be visible on an external network (adding terminals from the piconet 100 that the server is likely to communicate with into the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), the distribution of services among Open or Closed Devices present (roles of terminals stored in the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), and the distribution of resources among Open or Closed Devices present (applications, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware (server 110 with keypad 201 that connects to CPU 203 such that user is allowed to manage application directory in middleware 220 via AP1 221 through instructions sent to the CPU, see fig. 2A, col. 5, lines 1-25), and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware (API 221, see fig. 2A, lines 18-22).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Elkberg by

having a mobile terminal with a memory stores a middleware that contains an application directory of other mobile terminals, into the system of Haller for the benefit of storing different user profiles and applications of terminals that are in a piconet.

Regarding **claim 2** as applied to claim 1, Haller as modified by Elkberg discloses the claimed limitation. Elkberg further discloses a second open device connected to said Personal Area Network (see figs. 1, 2A, and 2B, col. 3, lines 45-54, col. 5, lines 1-3 and lines 26-29).

Regarding **Claim 3**, Haller discloses a Virtual Device composed of a multitude of stationary and/or portable electronic devices (see fig. 1, col. 4, lines 14-16) comprising: an Open Device with an available inner structure and a network interface (gateway device 106, see fig. 1, col. 4, lines 16-19); at least one Primitive Device (terminal 107 being a headset, pager, or watch, see fig. 1, col. 4, lines 16-31) arranged to communicate with other devices and act as a pure slave to said devices (see fig. 1, col. 4, lines 16-31), at least one Closed Device with a closed inner structure and a network interface (terminal 107 being a smart terminal, see figs. 1 and 2, col. 4, lines 16-31, and 61-67, col. 5, lines 1-8); said Open and Closed devices being connected in a Personal Area Network (gateway device 106 and terminals 107 communicate to form a personal area network, see fig. 1, col. 4, lines 15-19), a Personal Area Network middleware being installed in said Open Devices (gateway device 106 with PAN server that comprises a middleware, see col. 5, lines 61-63, col. 6, lines 36-42, and lines 58-62, col. 7, lines 13-20, and col. 9, lines 35-38 and 61-67), said first Open Device



being arranged to act as a personal Area Network controller (terminals 107 communicate by way of gateway device 106, see fig. 1, col. 4, lines 16-31 and lines 58-60), said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device (terminals 107 communicate by way of gateway device 106, and the gateway device having a PAN router for routing packets to other terminals see fig. 1, col. 4, lines 16-31 and lines 58-60), said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network (terminals 107 communicate by way of gateway device 106, and the gateway device having a PAN router for routing packets to other terminals see fig. 1, col. 4, lines 16-31 and lines 58-60).

Haller does not explicitly disclose wherein said Personal area network middleware being distributed between said open devices, said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network, said Open Device being arranged to discover and register any devices present in said Personal Area Network, said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices are members of said Private Area Network, which Open, Closed or Primitive Devices that are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices should be visible on an external network, the

distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present, said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware.

In the same field of endeavor, Elkberg discloses an open device (server 110, see figs. 1 and 2A, see, col. 3, lines 46-48) comprising a Personal Area Network middleware (middleware 220, see fig. 2A, col. 5, lines 13-15), wherein the Personal area network middleware is distributed between said open devices (see figs 2A-2B, 4A, 4B, col. 5, lines 1-34), wherein the Personal area network middleware is arranged to store and maintain a device profile (middleware 220 comprising application directory 230 to store device role and application in the network 100, see figs. 1 and 2A, col. 5, lines 22-25), said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network (application directory storing device type, application, and role, see fig. 2A, col. 5, lines 22-25), said Open Device being arranged to discover and register any devices present in said Personal Area Network (server 110 or server S detecting other terminal devices in the piconet 100, and registering the devices in its middleware, see figs. 1 and 4B, col. 6, lines 34-42, col. 7, lines 62-67, and col. 8, lines 1-32), said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile

including information on at least which Open, Closed or Primitive Devices are members of said Private Area Network (see fig. 2A-2B, 4A-B, col. 8, lines 23-32), which Open, Closed or Primitive Devices that are available for said Private Area Network (adding terminals from the piconet 100 that the server is likely to communicate with into the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), redirection information (device identifier, see figs. 2A-2B, 4A-4B, col. 8, lines 23-25), which Open, Closed or Primitive Devices should be visible on an external network (adding terminals from the piconet 100 that the server is likely to communicate with into the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), the distribution of services among Open or Closed Devices present (roles of terminals stored in the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), and the distribution of resources among Open or Closed Devices present (applications, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware (server 110 with keypad 201 that connects to CPU 203 such that user is allowed to manage application directory in middleware 220 via AP1 221 through instructions sent to the CPU, see fig. 2A, col. 5, lines 1-25), and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware (API 221, see fig. 2A, lines 18-22), each open device being arranged to invoke services running on other open device (see fig. 2A-2B, 4A-B, col. 7, lines 61-67, col. 8, lines 23-32).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Elkberg by having a mobile terminal with a memory stores a middleware that contains an application directory of other mobile terminals, into the system of Haller for the benefit of storing different user profiles and applications of terminals that are in a piconet.

Regarding **claim 7** as applied to claim 6, Haller as modified by Elkberg discloses the claimed limitation. Elkberg further discloses a web services platform installed on each open device to invoke web services running on other open devices (see col. 5, lines 61-67, and col. 6, lines 1-20).

Regarding **Claims 8 and 9**, Haller discloses a Virtual Device composed of a multitude of stationary and/or portable electronic devices (see fig. 1, col. 4, lines 14-16) comprising: an Open Device with an available inner structure and a network interface (gateway device 106, see fig. 1, col. 4, lines 16-19); at least one Primitive Device (terminal 107 being a headset, pager, or watch, see fig. 1, col. 4, lines 16-31) arranged to communicate with other devices and act as a pure slave to said devices (see fig. 1, col. 4, lines 16-31), at least one Closed Device with a closed inner structure and a network interface (terminal 107 being a smart terminal, see figs. 1 and 2, col. 4, lines 16-31, and 61-67, col. 5, lines 1-8); said at least one closed device being equipped with a network interface connected to an external network (network 105, see fig. 1, col. 4, lines 49-50) which includes a Personal area network server (smart terminal 107 accessing cellular network 105 via gateway device 106 that is part of a PAN, the gateway

device reading on the PAN server, see fig. 1, col. 4, lines 47-67, col. 5, lines 1-8), a personal area network middleware being installed on said server (gateway device 106 with PAN server that comprises a middleware, see col. 5, lines 61-63, col. 6, lines 36-42, and lines 58-62, col. 7, lines 13-20, and col. 9, lines 35-38 and 61-67), said Open and Closed devices and said server forming a Personal area network operated by said personal area network middleware (gateway device 106 and terminals 107 communicate to form a personal area network, see fig. 1, col. 4, lines 15-19), said Personal Area Network middleware being arranged to redirect an output stream from one device to an input port on another device (terminals 107 communicate by way of gateway device 106, and the gateway device having a PAN router for routing packets to other terminals see fig. 1, col. 4, lines 16-31 and lines 58-60), said Personal Area Network middleware being arranged to redirect an application to a specific device present in said Personal Area Network (terminals 107 communicate by way of gateway device 106, and the gateway device having a PAN router for routing packets to other terminals see fig. 1, col. 4, lines 16-31 and lines 58-60), said server being arranged to store a backup copy of information stored in said personal area network, and synchronize said backup copy with said information (see fig. 4, col. 6, lines 46-53, col. 8, lines 64-67, and col. 9, lines 1-30).

Haller does not explicitly disclose wherein said Personal Area Network middleware is arranged to store and maintain a device profile, said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said

Private Area Network, said Open Device being arranged to discover and register any devices present in said Personal Area Network, said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices are members of said Private Area Network, which Open, Closed or Primitive Devices that are available for said Private Area Network, redirection information, which Open, Closed or Primitive Devices should be visible on an external network, the distribution of services among Open or Closed Devices present, and the distribution of resources among Open or Closed Devices present, said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware, and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware.

In the same field of endeavor, Elkberg discloses a server (server 110, see figs. 1 and 2A, see, col. 3, lines 46-48) comprising a Personal Area Network middleware (middleware 220, see fig. 2A, col. 5, lines 13-15), wherein the Personal area network middleware is distributed between said open devices (see figs 2A-2B, 4A, 4B, col. 5, lines 1-34), wherein the Personal area network middleware is arranged to store and maintain a device profile (middleware 220 comprising application directory 230 to store device role and application in the network 100, see figs. 1 and 2A, col. 5, lines 22-25), said device profile including information on at least identity, type, capabilities and services offered by any Open, Closed or Primitive Devices available for said Private Area Network

(application directory storing device type, application, and role, see fig. 2A, col. 5, lines 22-25), said Open Device being arranged to discover and register any devices present in said Personal Area Network (server 110 or server S detecting other terminal devices in the piconet 100, and registering the devices in its middleware, see figs. 1 and 4B, col. 6, lines 34-42, col. 7, lines 62-67, and col. 8, lines 1-32), said Personal Area Network middleware being arranged to store and maintain a user profile, said user profile including information on at least which Open, Closed or Primitive Devices are members of said Private Area Network (see fig. 2A-2B, 4A-B, col. 8, lines 23-32), which Open, Closed or Primitive Devices that are available for said Private Area Network (adding terminals from the piconet 100 that the server is likely to communicate with into the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), redirection information (device identifier, see figs. 2A-2B, 4A-4B, col. 8, lines 23-25), which Open, Closed or Primitive Devices should be visible on an external network (adding terminals from the piconet 100 that the server is likely to communicate with into the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), the distribution of services among Open or Closed Devices present (roles of terminals stored in the application directory, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), and the distribution of resources among Open or Closed Devices present (applications, see fig. 2A-2B, 4A-B, col. 8, lines 23-32), said Personal Area Network middleware further including a user interface enabling the user to control the Personal Area Network middleware (server 110 with keypad 201 that connects to CPU 203 such that user is allowed to manage application directory in middleware

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220 via AP1 221 through instructions sent to the CPU, see fig. 2A, col. 5, lines 1-25), and an Application Programming Interface to said Personal Area Network middleware allowing applications access to capabilities and functions in said Personal Area Network middleware (API 221, see fig. 2A, lines 18-22), each open device being arranged to invoke services running on other open device (see fig. 2A-2B, 4A-B, col. 7, lines 61-67, col. 8, lines 23-32), each open device being arranged to invoke services running on other open device (see fig. 2A-2B, 4A-B, col. 7, lines 61-67, col. 8, lines 23-32).

It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of Elkberg by having a mobile terminal with a memory stores a middleware that contains an application directory of other mobile terminals, into the system of Haller for the benefit of storing different user profiles and applications of terminals that are in a piconet.

Regarding **claim 10** as applied to claim 9, Haller as modified by Elkberg discloses the claimed limitation. Elkberg further discloses wherein said server is arranged to periodically poll the network (server 110 uses Bluetooth for device detection, which requires polling at specific time intervals, see col. 3, lines 40-54, col. 6, lines 34-42).

Regarding **claims 4 and 12** as applied to claims 3 and 1, Haller as modified by Elkberg discloses the claimed limitation. Haller further discloses wherein the at least one of said Open or Closed devices is equipped with a network interface connected to an external network (gateway device 106



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connected to cellular network 105 indicates presence of a network interface, see fig. 1, col. 4, lines 37-40).

Regarding **claims 5 and 13** as applied to claims 4 and 12, Haller as modified by Elkberg discloses the claimed limitation. Haller further discloses a server in said external network (gateway device 106 connected to cellular network 105 indicates presence of a network interface, see fig. 1, col. 4, lines 37-40), said server being arranged to store a backup copy of information stored in said personal area network, and synchronize said backup copy with said information (see fig. 4, col. 6, lines 46-53, col. 8, lines 64-67, and col. 9, lines 1-30).

Regarding **claims 6 and 14** as applied to claims 5 and 13, Haller as modified by Elkberg discloses the claimed limitation. Elkberg further discloses wherein said Open device or devices is/are arranged to periodically poll the network (server 110 uses Bluetooth for device detection, which requires polling at specific time intervals, see col. 3, lines 40-54, col. 6, lines 34-42).

Regarding **claim 7** as applied to claim 6, Haller as modified by Elkberg discloses the claimed limitation. Elkberg further discloses a web services platform installed on each open device to invoke web services running on other open devices (see col. 5, lines 61-67, and col. 6, lines 1-20).

Regarding **claim 11, 15, or 16** as applied to claims 1 and 3, Haller as modified by Elkberg discloses the claimed limitation. Elkberg further discloses said Application Programming Interface is implemented as one of the following: Java, COBRA, or an XML Web service (see col. 5, lines 18-22, col. 6, lines 2-20).

***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eaton et al 6,888,811 discloses a communication system for location sensitive information and method therefor.

Saito et al 20020169886 discloses communication device and communication control device for enabling operation of control protocol for one network on other types of networks.

Wilhemsson et al 7,415,270 discloses middleware services layer for platform system for mobile terminals.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/  
Supervisory Patent Examiner, Art Unit 2617